

EXHIBIT C

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF HAWAII

----- In the Matter of -----)

PUBLIC UTILITIES COMMISSION)

DOCKET NO. 94-0226

Instituting a Proceeding on
Renewable Energy Resources,
Including the Development
and Use of Renewable Energy
Resources in the State of
Hawaii)
_____)

ORDER NO. 13849

Filed April 10, 1995

At 7:50 o'clock A.M.

Bertha F. Kurokawa
Chief Clerk of the Commission

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OF THE STATE OF HAWAII

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PUBLIC UTILITIES COMMISSION)

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Docket No. 94-0226

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ORDER

I.

By Order No. 13441, filed on August 11, 1994, the commission, pursuant to Senate Concurrent Resolution No. 40, S.D. 1 (1994), instituted an investigation to identify the policies, programs, procedures, and incentives needed for the successful implementation of renewable resource technologies in the State of Hawaii. The commission named as parties to this proceeding the Division of Consumer Advocacy of the Department of Commerce and Consumer Affairs; Hawaiian Electric Company, Inc.; Hawaii Electric Light Company, Inc.; Maui Electric Company, Limited; and Kauai Electric Division of Citizen's Utilities Company.

The Department of Business, Economic Development, and Tourism (DBEDT), participants of the 1993 Energy and Environmental Summit, renewable energy developers and vendors, and all interested parties were invited to intervene or participate in the docket.

By Order No. 13609, filed on October 19, 1994, the commission granted intervenor status to the following entities:

- (1) DBEDT;
- (2) The County of Maui;
- (3) The County of Hawaii;
- (4) The County of Kauai;
- (5) The Honorable Matthew M. Matsunaga;
- (6) The Pacific International Center for High Technology Research;
- (7) Makani Uwila Power Corporation;
- (8) John J. Crouch, dba Energy Resource Systems;
- (9) Kahua Ranch, Ltd.;
- (10) Hawaiian Commercial and Sugar Company;
- (11) Waimana Enterprises, Inc.;
- (12) Inter Island Solar Supply; and
- (13) TRM/Wind Energy International.

By Orders No. 13741, No. 13746, and No. 13779, filed on January 23, 1995, January 30, 1995, and February 22, 1995, respectively, the commission also allowed David A. Rezachek, Zond Pacific, Inc., and RLA Consulting, Inc. to intervene.

On November 10, 1994, the commission held an informal meeting with the parties to discuss how best to proceed with the docket. The commission subsequently conducted a series of workshops and discussion sessions to assist the parties and commission staff in reaching a common level of understanding of the critical issues relevant to renewable energy resources. Topics covered included state, county, and federal policy; experiences in the State of Hawaii and other jurisdictions with renewable energy

resource programs and projects; avoided cost analysis; competitive resource acquisition; integrated resource planning; and contract issues.

II.

The commission believes the parties are now ready to engage in a consensus building process to identify the barriers to renewable resource deployment in Hawaii and formulate specific strategies to remove these barriers. This process is intended to provide the parties with the opportunity to resolve areas of disagreement and reach consensus on as many issues as possible. The expected outcome of the consensus building process is a collaborative document which will outline the following:

- (1) All barriers, real or perceived, that impede the utilization of renewable energy resources in Hawaii;
- (2) Actual strategies to remove the barriers identified and deploy the utilization of renewable energy resources;
- (3) A list delineating strategies upon which the parties agree and disagree, and where agreement could not be reached, the reasons for disagreement and the extent to which compromise or alternative strategies were sought; and
- (4) Strategies that require further examination.

In keeping with the objective of this docket, i.e., to work towards the actual implementation of renewable energy resources, the commission recommends that the lion's share of the

parties' efforts in consensus building be focused on the formulation of specific, concrete strategies for consideration by the Legislature, the commission, the utilities, and developers and users of renewable energy resources.

Based on information received from the workshops and discussions held in this docket, the commission has compiled a preliminary list of barriers and strategies with respect to renewable energy resource deployment. SEE attached Exhibit A. At this time, we seek input from the parties with regard to the following:

- (1) Additional barriers and strategies, if any, that should be discussed in this docket;
- (2) Recommendations for appropriate groupings of all barriers and strategies identified; and
- (3) A list of outstanding questions and concerns, if any, that require consideration in this docket.

Receipt of this information from the parties will assist in the formulation of a list of barriers and strategies to serve as a springboard for the consensus building process.

III.

THE COMMISSION ORDERS:

1. In preparation for consensus building in this docket, the parties shall submit the following to the commission by April 21, 1995:

- a. A listing of barriers and strategies, if any, that should be discussed in this docket and, thus, added to Exhibit A;

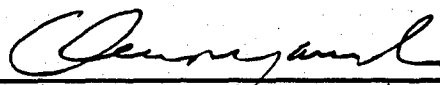
- b. Recommendations for appropriate groupings of all barriers and strategies identified; and
- c. A list of outstanding questions and concerns, if any, that require consideration in this docket.

2. A meeting with the parties will be held in the commission's hearing room on May 11, 1995, from 8:30 a.m. to 4:30 p.m., to discuss and establish the process and procedures for consensus building; develop an agenda and schedule for subsequent meetings; group the barriers and strategies identified by the commission, the discussion session participants, and the parties to the docket; and reach general agreement on the major barriers and strategies to be addressed in consensus building. An experienced facilitator of the collaborative process will be present to lend assistance.


DONE at Honolulu, Hawaii this 10th day of April, 1995.

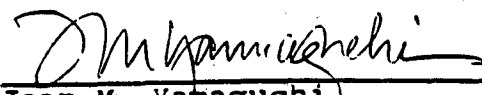
PUBLIC UTILITIES COMMISSION
OF THE STATE OF HAWAII

By (EXCUSED)
Yukio Naito, Chairman

By 
Dennis R. Yamada, Commissioner

APPROVED AS TO FORM:

By 
John F. Spierling, Commissioner


Joan M. Yamaguchi
Commission Counsel

94-0026.vn

DOCKET NO. 94-0226
INVESTIGATION OF RENEWABLE ENERGY RESOURCES

Summary of Barriers and Strategies
Identified During Discussion Sessions

(The following list of renewable energy (RE) barriers and strategies identified during the discussion session has been edited by the Commission staff. The list does it imply the approval or preference of the Commission or any party or intervenor to the docket.)

A. Barriers Identified

1. Legal (Statutory or Regulatory)
 - a. Conflicting state/federal policies
 - b. Complex and lengthy permitting process
 - c. Current treatment of avoided cost
2. Economic/Financial
 - a. Uncertain cost effectiveness of RE resources
 - b. Lack of utility incentives/customer unwillingness to purchase RE
 - c. Current fuel adjustment clause passes risk to customers
 - d. Inadequate cost/benefit resource analysis methods
 - e. High initial capital cost of RE projects
 - f. Limited penetration due to curtailment practices of the utility
3. Social/Environmental
 - a. Negative cost impacts on utilities and rates/ratepayers
 - b. Need to identify/clarify roles of the utility and the developer
 - c. NIMBY syndrome for siting RE projects

EXHIBIT A

- d. Potential negative impacts on wildlife and air/water quality

4. Physical

- a. Intermittency of RE (non-firm power)
- b. Long-term reliability of the technology
- c. Need to integrate technology with the grid
- d. Limited land availability

B. Strategies Identified

1. Statutory

- a. Establish clearly stated RE/diversification goals
- b. Establish set-asides/procurement targets
- c. Offer tax credits to developers, users
- d. Establish a state revolving fund for low- or no-interest loans for RE projects
- e. Permit Special Purpose Revenue Bond Financing for RE projects
- f. Provide funding for public education
- g. Establish fund for research, development, demonstration & commercialization of energy storage systems
- h. Streamline and simplify licensing and permitting process
- i. Enact legislation to assure "solar access" for projects' lifetimes
- j. Mandate cost-effective solar-water heating in public housing
- k. Allow licensed solar contractors to do complete solar water heating and PV installations

1. Allow developers to acquire leases and water rights through early contract negotiations (Impose performance conditions to ensure developer is capable of completing project)
- m. Develop generic plans and pre-approved sites and simplify and/or waive permit requirements
- n. Establish equitable rules for small scale projects
2. Departmental/Agency
 - a. Establish measures to weigh how RE supports the public interest
 - b. Identify all suitable sites for renewable technologies
 - c. Include suitable sites in county community development plans
 - d. Investigate potential for dual use of state agricultural and conservation lands for siting RE projects
 - e. Promote consumer awareness of existing conservation programs and incentives
3. Regulatory
 - a. Mandate pilot programs
 - b. Provide utilities with incentives
 - c. Establish set-asides
 - d. Allow safe harbors for demonstration projects
 - e. Allow special rates for renewables (e.g., green pricing)

- f. Require utilities to sign standard contracts with capacity and energy conditions for sales to utilities
- g. Base long-term contract price on avoided cost of new utility plants
- h. Adopt standards/guidelines to enforce mandates and to promote fair negotiations between utilities and developers
- i. Encourage use of standard offer contracts with fixed or predictable payment streams
- j. Require payment of capacity and energy values to producers; if utility owned, allow fair rate of return
- k. Eliminate use of dispatchability or minimum capacity factors in screening resource options
- l. Streamline regulatory approval process for renewable power purchase agreements
- m. Adopt IRP goals or policies to (1) include RE in the utility generation mix, (2) include Independent Power Producers in the planning process, (3) permit competitive bidding, and (4) recognize externalities and other RE attributes such as fuel diversity
- n. Adopt provisions for non-utility generators for use of renewables
- o. Investigate niche applications for renewables (transmission and distribution planning)
- p. Permit off-grid PV

- q. Establish competitive bidding policies for new resources
- r. Standardize method of calculating avoided cost and de-couple RE payments from oil prices in avoided cost calculation and payment provisions of power purchase agreements, (i.e., level payment stream over the life of the power purchase agreement which is not pegged to the price of oil)
- s. Apply an adder to fossil fuel cost in calculating avoided cost
- t. Eliminate the use of a fuel clause on a forward going basis

4. Utility

- a. Assume leadership role in efforts to deploy renewable energy; adopt vision to maximize development of renewables
- b. Reflect county/community visions (i.e., quality of life goals) in utility long-range plans
- c. Support Hawaii's economic efficiency and sustainability by embracing and achieving maximum cost-effective deployment of renewables
- d. Offer counties energy choices which match appropriate energy services with renewable energy systems
- e. Establish mechanisms of support (i.e., public hearings, customer polls) to assess customer willingness to pay for RE

- f. Participate in collaboratives to purchase equipment large-scale
- g. Establish customer-oriented programs such as green pricing
- h. Include renewables in preferred energy mix
- i. Issue green RFPs
- j. Initiate R & D pilot programs
- k. Adopt net energy billing program
- l. Negotiate fixed price oil contracts
- m. Pursue load control options (e.g., controlled water heaters, load storage)
- n. Expedite the contracting process

5. Developer

- a. Expand implementation schedules to account for pre-development activities
- b. Develop new biomass resources
- c. Develop niche applications
- d. Support cost-shared R & D

CERTIFICATE OF SERVICE

I hereby certify that I have this date served a copy of the foregoing Order No. 13849 upon the following parties, by causing a copy hereof to be mailed, postage prepaid, and properly addressed to each such party.

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Bertha F. Kurosawa

Bertha F. Kurosawa
Chief Clerk

DATED: April 10, 1995